

Appl. No. 10/663,215
Amdt. dated December 15, 2003
Reply to Notice to File Missing Parts of December 9, 2003

PATENT

REMARKS

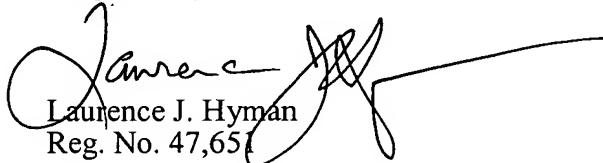
Claims 1-50 are pending in this application. Claims 23 and 29 have been amended by the current amendment. The amendments to claims 23 and 29 insert sequence identifiers in adherence with 37 C.F.R. §§1.821 to 1.825.

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-23, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



Laurence J. Hyman
Reg. No. 47,651

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
Attachments
LJH:dmw
60102023 v1

SEQUENCE LISTING



<10> Sherman, Irwin
Winograd, Enrique
The Regents of the University of California

<120> Peptides Which Generate Antibodies Resulting in Lysis
of Pathologically Adherent Erythrocytes

<130> 023070-140500US

<140> US 10/663,215

<141> 2003-09-15

<160> 23

<170> PatentIn Ver. 2.1

<210> 1

<211> 911

<212> PRT

<213> Homo sapiens

<220>

<223> human anion exchange protein 1 (AE1), band 3
protein

<400> 1

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20 25 30

Glu Pro Ala Ala His Asp Thr Glu Ala Thr Ala Thr Asp Tyr His Thr
35 40 45

Thr Ser His Pro Gly Thr His Glu Val Tyr Val Glu Leu Gln Glu Leu
50 55 60

Val Met Asp Glu Lys Asn Gln Glu Leu Arg Trp Met Glu Ala Ala Arg
65 70 75 80

Trp Val Gln Leu Glu Glu Asn Leu Gly Glu Asn Gly Ala Trp Gly Arg
85 90 95

Pro His Leu Ser His Leu Thr Phe Trp Ser Leu Leu Glu Leu Arg Arg
100 105 110

Val Phe Thr Lys Gly Thr Val Leu Leu Asp Leu Gln Glu Thr Ser Leu
115 120 125

Ala Gly Val Ala Asn Gln Leu Leu Asp Arg Phe Ile Phe Glu Asp Gln
130 135 140

Ile Arg Pro Gln Asp Arg Glu Glu Leu Leu Arg Ala Leu Leu Leu Lys
145 150 155 160

His Ser His Ala Gly Glu Leu Glu Ala Leu Gly Gly Val Lys Pro Ala
165 170 175

Val Leu Thr Arg Ser Gly Asp Pro Ser Gln Pro Leu Leu Pro Gln His
 180 185 190
 Ser Ser Leu Glu Thr Gln Leu Phe Cys Glu Gln Gly Asp Gly Gly Thr
 195 200 205
 Glu Gly His Ser Pro Ser Gly Ile Leu Glu Lys Ile Pro Pro Asp Ser
 210 215 220
 Glu Ala Thr Leu Val Leu Val Gly Arg Ala Asp Phe Leu Glu Gln Pro
 225 230 235 240
 Val Leu Gly Phe Val Arg Leu Gln Glu Ala Ala Glu Leu Glu Ala Val
 245 250 255
 Glu Leu Pro Val Pro Ile Arg Phe Leu Phe Val Leu Leu Gly Pro Glu
 260 265 270
 Ala Pro His Ile Asp Tyr Thr Gln Leu Gly Arg Ala Ala Ala Thr Leu
 275 280 285
 Met Ser Glu Arg Val Phe Arg Ile Asp Ala Tyr Met Ala Gln Ser Arg
 290 295 300
 Gly Glu Leu Leu His Ser Leu Glu Gly Phe Leu Asp Cys Ser Leu Val
 305 310 315 320
 Leu Pro Pro Thr Asp Ala Pro Ser Glu Gln Ala Leu Leu Ser Leu Val
 325 330 335
 Pro Val Gln Arg Glu Leu Leu Arg Arg Arg Tyr Gln Ser Ser Pro Ala
 340 345 350
 Lys Pro Asp Ser Ser Phe Tyr Lys Gly Leu Asp Leu Asn Gly Gly Pro
 355 360 365
 Asp Asp Pro Leu Gln Gln Thr Gly Gln Leu Phe Gly Gly Leu Val Arg
 370 375 380
 Asp Ile Arg Arg Arg Tyr Pro Tyr Tyr Leu Ser Asp Ile Thr Asp Ala
 385 390 395 400
 Phe Ser Pro Gln Val Leu Ala Ala Val Ile Phe Ile Tyr Phe Ala Ala
 405 410 415
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 420 425 430
 Asn Gln Met Gly Val Ser Glu Leu Leu Ile Ser Thr Ala Val Gln Gly
 435 440 445
 Ile Leu Phe Ala Leu Leu Gly Ala Gln Pro Leu Leu Val Val Gly Phe
 450 455 460
 Ser Gly Pro Leu Leu Val Phe Glu Glu Ala Phe Phe Ser Phe Cys Glu
 465 470 475 480
 Thr Asn Gly Leu Glu Tyr Ile Val Gly Arg Val Trp Ile Gly Phe Trp
 485 490 495

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Val Arg Phe Ile Ser Arg Tyr Thr Gln Glu Ile Phe Ser Phe Leu Ile
 515 520 525

Ser Leu Ile Phe Ile Tyr Glu Thr Phe Ser Lys Leu Ile Lys Ile Phe
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Gln Asp His Pro Leu Gln Lys Thr Tyr Asn Tyr Asn Val Leu Met Val
 545 550 555 560

Pro Lys Pro Gln Gly Pro Leu Pro Asn Thr Ala Leu Leu Ser Leu Val
 565 570 575

Leu Met Ala Gly Thr Phe Phe Ala Met Met Leu Arg Lys Phe Lys
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 595 600 605

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Ser Glu Phe Pro Ile Trp Met Met Phe Ala Ser Ala Leu Pro Ala Leu
 660 665 670

Leu Val Phe Ile Leu Ile Phe Leu Glu Ser Gln Ile Thr Thr Leu Ile
 675 680 685

Val Ser Lys Pro Glu Arg Lys Met Val Lys Gly Ser Gly Phe His Leu
 690 695 700

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Met Pro Trp Leu Ser Ala Thr Thr Val Arg Ser Val Thr His Ala Asn
 725 730 735

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 740 745 750

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<210> 4
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<220>
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when used as antigen raises antibodies which bind
to and cause destruction of pathologically
adherent erythrocytes

<220>
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<222> (1)..(10)
<223> Xaa = amino acid charged under physiological
conditions

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<210> 5
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<212> PRT
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native AE1 sequence, peptide including two
residues on either side of predicted alpha-helix

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<210> 6
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<212> PRT
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when used as antigen raises antibodies which bind
to and cause destruction of pathologically
adherent erythrocytes

<220>
<221> MOD_RES
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<223> Xaa = amino acid charged under physiological
conditions

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<210> 7
<211> 10
<212> PRT
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<223> Description of Artificial Sequence:exemplar
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<210> 8
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<212> PRT
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<220>
<223> Description of Artificial Sequence:exemplar
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<400> 8
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<210> 9
<211> 10
<212> PRT
<213> Artificial Sequence

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<223> Description of Artificial Sequence:exemplar
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<213> Artificial Sequence

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<220>
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<210> 20
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<220>
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<210> 21
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<212> PRT
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<220>
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<400> 21
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<210> 22
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<212> PRT
<213> Artificial Sequence

<220>
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ID NO:5 or 6

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1 5

<210> 23
<211> 9
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<220>
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fragment containing amino terminal portion of SEQ
ID NO:5 or 6

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